

ABSTRACT OF THE DISCLOSURE

A semiconductor integrated circuit comprises a semiconductor chip, a power supply terminal provided on the semiconductor chip for receiving a voltage from an external power supply source, an internal circuit provided on the semiconductor chip, a power supply circuit provided on the semiconductor chip for transforming an external power supply voltage received from the power supply terminal for supplying a source voltage resulting from the voltage transformation to the internal circuit, and a control circuit provided on the semiconductor chip for controlling the power supply circuit, wherein the control circuit includes external power supply voltage detecting means and/or temperature detecting means and responds to the signal from the external power supply voltage detecting means and/or the temperature detecting means by changing the power supply voltage to the internal circuit to thereby maintain the operating speed of the internal circuit to be constant.